Gulf of Mexico Harmful Algal Bloom Bulletin

29 September 2005

National Ocean Service

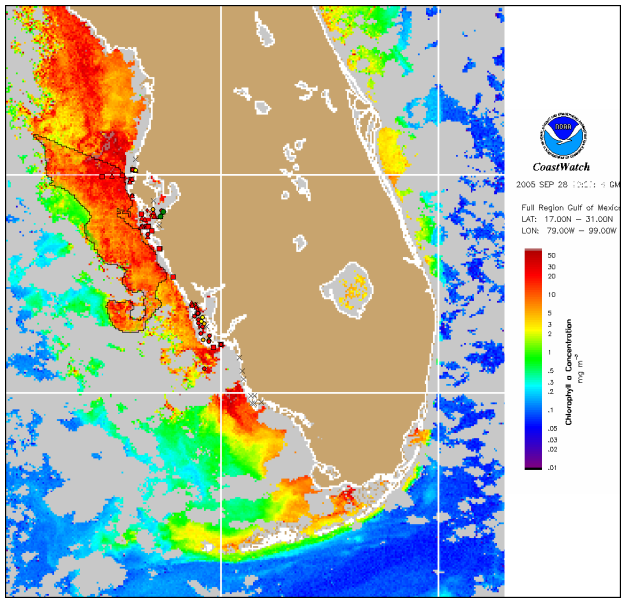
National Environmental Satellite, Data, and Information Service

Last bulletin: September 26, 2005

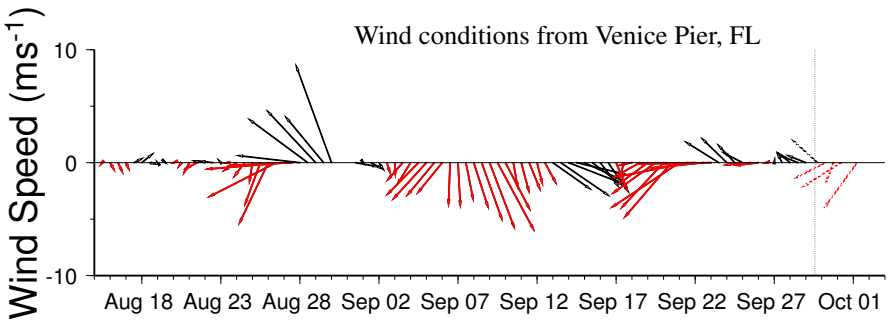
Conditions: A harmful algal bloom has been identified from Pinellas County to Collier County. The following patchy impacts are possible today and tomorrow, especially in the afternoon: low in eastern Bay, northern Pinellas, southern Lee, and Collier Counties; moderate in central to southern Pinellas, northern to central Manatee, central to southern Sarasota, and northern to central Lee Counties; high in eastern Gulf, western Franklin, southern Manatee and northern Sarasota Counties; very low in eastern Franklin and Charlotte Counties. The following patchy impacts are possible Saturday: very low in eastern Franklin, Pinellas, Lee, Collier, northern to central Manatee, and central to southern Sarasota Counties; low in eastern Bay, southern Manatee and northern Sarasota Counties; high in eastern Gulf and western Franklin Counties. The following patchy impacts are possible Sunday and Monday: very low in eastern Bay, Pinellas, Lee, Collier, northern to central Manatee, and central to southern Sarasota Counties; low in eastern Gulf, western Franklin, southern Manatee and northern Sarasota Counties. Dead fish have been reported in Dunedin, Bradenton Beach, Sanibel, Fort Myers Beach, Englewood, Cape Coral, Venice, and Bradenton since September 22. Dead fish smell, while unpleasant, does not produce the same respiratory irritation as red tide.

Analysis: Recent imagery indicates that the bloom persists from Pinellas County to Collier, with elevated chlorophyll extending into the panhandle. Mixed blooms probably border the bloom to the north. Some of the elevated chlorophyll is probably due to resuspension caused by recent tropical storms. Near the sample-confirmed northern extent of the bloom, imagery indicates a chlorophyll concentration > 20 μg/L at 28°10'N 82°55'W, 14 km (8 miles) from Tarpon Springs. Near the sample-confirmed southern extent of the bloom, imagery indicates a chlorophyll concentration > 20 μg/L at 25°55'N 81°48'W, 9 km (5 miles) from Marco Island. Onshore transport is possible this afternoon. Upwelling-favorable winds and offshore transport is possible tomorrow through Monday. Westward expansion of the bloom is possible through Monday.

Bronder, Fenstermacher

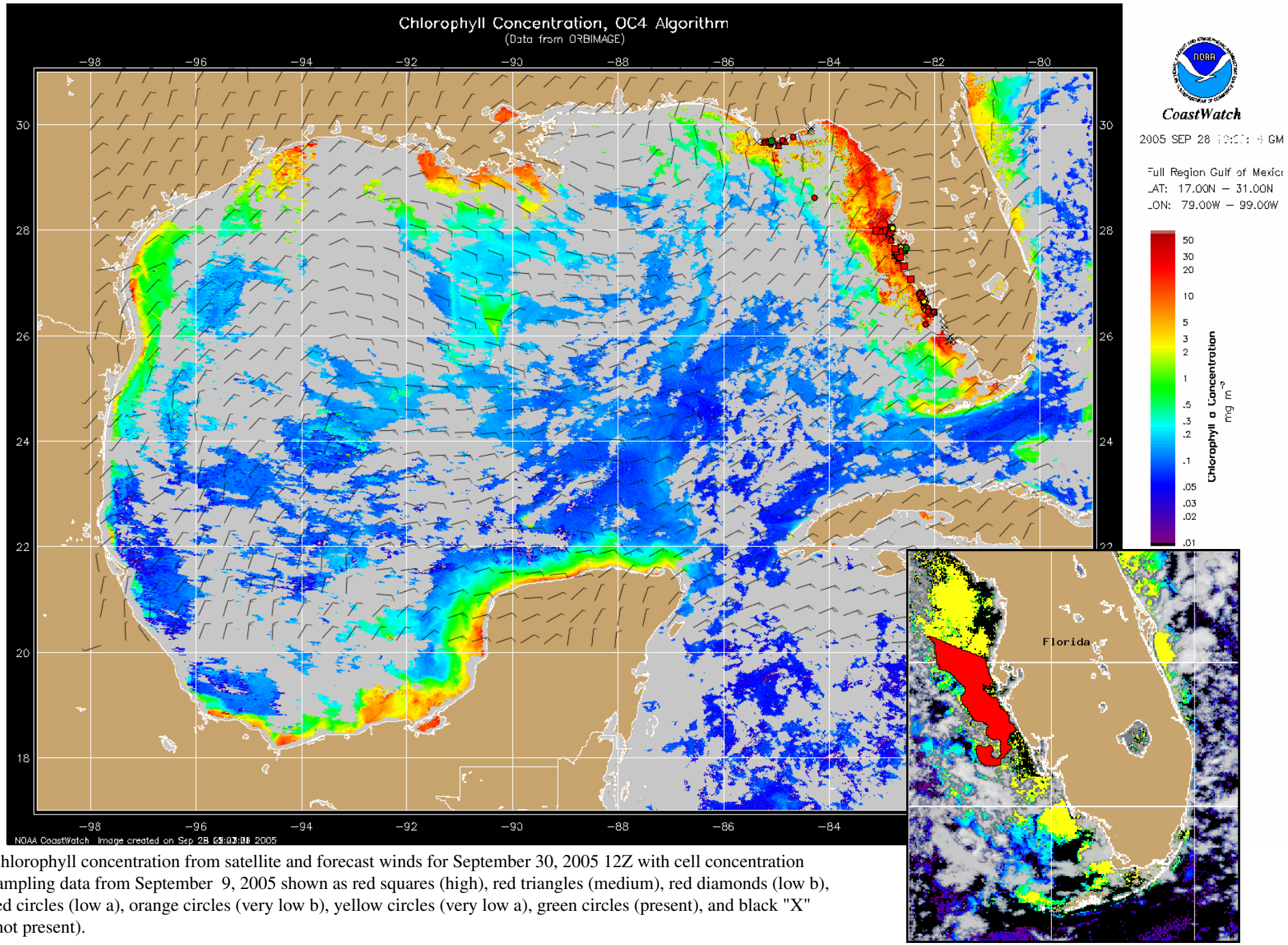


Chlorophyll concentration from satellite with HAB areas shown by red polygon(s). Cell concentration sampling data from September 9, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Winds will be light and variable today becoming onshore (10 kts, 5 m/s) in the afternoon, northeast (5 kts, 3 m/s) tomorrow becoming northwest in the afternoon, east (20 kts, 10 m/s) Saturday, northeast (15 kts, 8 m/s) Sunday and Monday.



Chlorophyll concentration from satellite and forecast winds for September 30, 2005 12Z with cell concentration sampling data from September 9, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Blooms shown in red (see p. 1 analysis)